DECLARATION AND POWER OF ATTORNEY

(Related Application)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

COMPOSITIONS AND METHODS OF USE OF MAMMALIAN

RETROTRANSPOSONS, the specification of which (check one)

[]	is attached hereto.
[X]	was filed on April 28, 1997
	as Application No. 08/847,844

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to herein.

I acknowledge the duty to disclose information which is material to patentability in accordance with Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d), of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

FOREIGN PRIORITY APPLICATION(S)

		•	Priority Claimed
			[] Yes[] No
(Number)	(Country)	(Day/month/year filed)	

I hereby claim the benefit under Title 35, United States Code §119(e) of any United States provisional patent application(s) listed below and have also identified below any United States provisional patent application(s) having a filing date before that of the application on which priority is claimed.

PROVISIONAL PRIORITY PATENT APPLICATION

		Priority Claimed
60/006,831	November 16, 1995	[X] Yes [] No
(Application No.)	(Filing Date)	

I hereby claim the benefit under Title 35, United States Code, Section 120, of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application or in the prior U.S. provisional application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose information material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56, which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

08/749,805	November 15, 1996	Pending Pending
(Application Serial No.)	(Filing Date)	(Status)(patented, pending, abandoned)

And I hereby appoint Ronald L. Panitch, Registration No. 22,825; William W. Schwarze, Registration No. 25,918; Alan S. Nadel, Registration No. 27,363; Leslie L. Kasten, Jr., Registration No. 28,959; Joel S. Goldhammer, Registration No. 22,130; John Jamieson, Jr., Registration No. 29,546; Martin G. Belisario, Registration No. 32,886; Lynda L. Calderone, Registration No. 35,837; Charles E. Bergère, Registration No. 36,337; Steven H. Meyer, Registration No. 37,189; Randolph J. Huis, Registration No. 34,626; Clark A. Jablon, Registration No. 35,039; Christopher Egolf, Registration No. 27,633; Kathryn Leary, Registration No. 36,317; Gary D. Colby, Registration No. P-40,961; and Catherine M. Joyce, Registration No. P-40,668, as my attorneys or agents with full power of substitution and

revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Address all correspondence to PANITCH SCHWARZE JACOBS & NADEL, P.C., 1601 Market Street, 36th Floor, Philadelphia, Pennsylvania 19103. Please direct all communications and telephone calls to Kathryn Leary, Ph.D. at (215) 567-2020.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole	
or first inventor	Haig H. Kazazian Jr.
Inventor's Signature	5/20/97 //
Date	
Residence	Baltimore, Maryland
Citizenship	U.S.A.
	1015 Winding Way
	Baltimore, MD 21210
Full name of second joint inventor, if any	Jef D. Boeke
Inventor's Signature	
Date	· · · · · · · · · · · · · · · · · · ·
Residence	Baltimore, Maryland
Citizenship	U.S.A.
Post Office Address	835 West University Parkway
	Baltimore, MD 21210

Full name of third joint	
inventor, if any	John V. Moran
Inventor's Signature	last V Plan
Date	5/20/97
	Exton, Pennsylvania
Citizenship	U.S.A.
	101 Atherton Drive
	Exton, PA 19341
Full name of fourth joint	· 1
inventor, if any	Beth A. Dombroski
Inventor's Signature	Beth a Sombrashi
Date	5/20/97
	Springfield, Pennsylvania
Citizenship	U,S,A,
Post Office Address	120 South Forest Road
	Springfield, PA 19064



DECLARATION AND POWER OF ATTORNEY

(Related Application)

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COMPOSITIONS AND METHODS OF USE OF MAMMALIAN

RETROTRANSPOSONS, the specification of which (check one)

[]	is attached hereto.	
[X]	was filed on April 28, 1997	
	as Application No. 08/847,844	

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			Priority Claimed
		·	[] Yes[] No
(Number)	(Country)	(Day/month/year filed)	

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PROVISIONAL PRIORITY PATENT APPLICATION

•			Priority Claimed
60/006,831	:	November 16, 1995	[X] Yes [] No
(Application No.)		(Filing Date)	

I hereby claim the benefit under Title 35, United States Code, Section 120, of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application or in the prior U.S. provisional application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose information material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56, which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

08/749,805	November 15, 1996	Pending
(Application Serial No.)	(Filing Date)	(Status)(patented, pending, abandoned)

And I hereby appoint Ronald L. Panitch, Registration No. 22,825; William W. Schwarze, Registration No. 25,918; Alan S. Nadel, Registration No. 27,363; Leslie L. Kasten, Jr., Registration No. 28,959; Joel S. Goldhammer, Registration No. 22,130; John Jamieson, Jr., Registration No. 29,546; Martin G. Belisario, Registration No. 32,886; Lynda L. Calderone, Registration No. 35,837; Charles E. Bergère, Registration No. 36,337; Steven H. Meyer, Registration No. 37,189; Randolph J. Huis, Registration No. 34,626; Clark A. Jablon, Registration No. 35,039; Christopher Egolf, Registration No. 27,633; Kathryn Leary, Registration No. 36,317; Gary D. Colby, Registration No. P-40,961; and Catherine M. Joyce, Registration No. P-40,668, as my attorneys or agents with full power of substitution and

revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole	Haig H. Kazazian Jr.
Inventor's Signature	
Date	
	Baltimore, Maryland
Citizenship	U.S.A.
Post Office Address	1015 Winding Way
	Baltimore, MD 21210
Full name of second joint inventor, if any	Jef D. Boeke
Inventor's Signature	57
Date	
Residence	Baltimore, Maryland
Citizenship	U.S.A.
Post Office Address	835 West University Parkway
	Baltimore, MD 21210

inventor, if any	John V. Moran	
·		
		•
	Exton, Pennsylvania	•
	U.S.A.	
	101 Atherton Drive	
	Exton, PA 19341	•
Full name of fourth joint inventor, if any	/ Beth A. Dombroski	
Inventor's Signature		
Date		
	Springfield, Pennsylvania	
Citizenship	U.S.A.	
Post Office Address	120 South Forest Road	
	Springfield DA 10064	

Attorney's Docket No. <u>9596-23U2 (I-1346)</u>

Applicant or Patentee:

Haig H. Kazazian, Jr., Jef D. Boeke, John V. Moran and

Beth A. Dombroski

Application or Patent No.:

08/847,844

Filed or Issued:

April 28, 1997

For: COMPOSITIONS AND METHODS OF USE OF MAMMALIAN

RETROTRANSPOSONS

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS (37 CFR 1.9(f) and 1.27(d)) - NONPROFIT ORGANIZATION

NAME OF ORGANIZATION:

The Johns Hopkins University

ADDRESS OF ORGANIZATION:

2024 E. Monument Street, Suite 2-100

Baltimore, MD 21205

TYPE OF ORGANIZATION:

[X] U	injuersity or other institution of higher education			
	University or other institution of higher education.			
	Tax exempt under Internal Revenue Service Code (26 USC 501(a) and 501(c)(3)).			
[] Nonprofit scientific or educational under statute of state of the United State America.				
	• • • • • • • • • • • • • • • • • • • •			
IN CO	ame of State			
	itation of Statute			
	Yould qualify as tax exempt under Internal Revenue Code (26 USC 501(a) and 01(c)(3) if located in the United States of America.			
[] V	/ould qualify as nonprofit scientific or educational under statute of state of			
U	nited States of America if located in the United States of America.			
C	ame of Stateitation of Statute			
•				
organization as of 41(a) and (b) of	that the nonprofit organization identified above qualifies as a nonprofit lefined in 37 CFR 1.9(e) for purposes of paying reduced fees under Sections Fitle 35, United States Code, with regard to the invention entitled Compositions Use of Mammalian Retrotransposons by inventors Haig H. Kazazian, Jr.,			
	hn V. Moran and Beth A. Dombroski described in			
JCI D. DUCKC, JU	m v. Wordin and Deth A. Dombroski described in			
[] th	e specification filed herewith.			
	pplication No. <u>08/847,844</u>			
	iled <u>April 28, 1997</u>			
	atent No			
I barabu daalara	suedthat rights under contract or law have been conveyed to and remain with the			

I hereby declare that rights under contract or law have been conveyed to and remain with the nonprofit organization with regard to the above-identified invention.

If the rights held by the nonprofit organization are not exclusive, each individual concern or organization having rights to the invention is listed below* and no rights to the invention are held

by any person, other than the inventor, who could not qualify as a small business concern under 37 CFR 1.9(d) or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities (37 CFR 1.27).

FULL NAME	The Trustees of University of Pennsylvania		
ADDRESS	3700 Market Street, Suite 300		
	Philadelphia, PA 19104		
[] Individual	[] Small Business Concern	[X] Nonprofit Organization	
FULL NAME			
ADDRESS			
[]Individual	[]Small Business/Concern	[]Nonprofit Organization	

I acknowledge the duty to file, in this application or patent, notification of any change in the status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b)).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING HOWARD W. Califano	
TITLE IN ORGANIZATION Hissistant Dean and Virector	
ADDRESS OF PERSON SIGNING 2024 E Monument Street, Suite 2-100	
Baltimore, MD 21205	
SIGNATURE Muliforn DATE: 10-20-97	
	_

Attorney's Docket No. <u>9596-23U2 (I-1346)</u>

Applicant or Patentee:

Haig H. Kazazian, Jr., Jef D. Boeke, John V. Moran and

Beth A. Dombroski

Application or Patent No.:

08/847,844

Filed or Issued:

April 28, 1997

COMPOSITIONS AND METHODS OF USE OF MAMMALIAN

RETROTRANSPOSONS

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS (37 CFR 1.9(f) and 1.27(d)) - NONPROFIT ORGANIZATION

NAME OF ORGANIZATION:

The Trustees of the University of Pennsylvania

ADDRESS OF ORGANIZATION: 3700 Market Street, Suite 300

Philadelphia, PA 19104

TYPE OF ORGANIZATION:

[X]	University or other institution of higher education.		
	Tax exempt under Internal Revenue Service Code (26 USC 501(a) and 501(c)(3)		
[]	Nonprofit scientific or educational under statute of state of the United States of America.		
	Name of State		
	Citation of Statute		
[]	Would qualify as tax exempt under Internal Revenue Code (26 USC 501(a) and		
	501(c)(3) if located in the United States of America.		
[]	Would qualify as nonprofit scientific or educational under statute of state of		
	United States of America if located in the United States of America.		
	Name of State		
	Citation of Statute		

I hereby declare that the nonprofit organization identified above qualifies as a nonprofit organization as defined in 37 CFR 1.9(e) for purposes of paying reduced fees under Sections 41(a) and (b) of Title 35, United States Code, with regard to the invention entitled Compositions and Methods of Use of Mammalian Retrotransposons by inventors Haig H. Kazazian, Jr., Jef D. Boeke, John V. Moran and Beth A. Dombroski described in

	the specification filed herewith.	
[X]	Application No. 08/847,844	
	Filed April 28, 1997	
[] [Patent No.	
	Issued	

I hereby declare that rights under contract or law have been conveyed to and remain with the nonprofit organization with regard to the above-identified invention.

If the rights held by the nonprofit organization are not exclusive, each individual concern or organization having rights to the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who could not qualify as a small business concern under 37 CFR 1.9(d) or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities (37 CFR 1.27).

FULL NAMEADDRESS[] Individual	The John Hopkins University 2024 E. Monument Street, Suite 2 Baltimore, MD 21205 [] Small Business Concern	[X] Nonprofit Organization			
FULL NAME ADDRESS					
[]Individual	[]Small Business Concern	[]Nonprofit Organization			
I acknowledge the duty to file, in this application or patent, notification of any change in the status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b)).					
statements made on in statements were made punishable by fine or in Code, and that such w	imprisonment, or both, under Secti	lo be true; and further that these lse statements and the like so made are on 1001 of Title 18 of the United States ize the validity of the application, any			
NAME OF PERSON SIGNINGEvelyn H. McConathy, Esq. TITLE IN ORGANIZATIONDirector of Intellectual Property ADDRESS OF PERSON SIGNING Center for Technology Transfer, Suite 300 3700 Market Street, Philadelphia, PA 19104					
SIGNATURE	yn H. Mc Conathy De	ATE: <u>5/15/97</u>			